SIP Software Release 4.3 Service Pack 2 for 1100 / 1200 Series IP Deskphones: Read me Document

Avaya is pleased to announce the availability of SIP Software Release 4.3 Service Pack 2 for 1100 and 1200 Series IP Deskphones. SIP Software Release 4.3 Service Pack 2 (SIP R4.3 SP2) provides User Experience and quality improvements particularly for better interworking with IP Office and some language translation improvements.

SIP R4.3 SP2 is available in the following software versions for the following IP Deskphones:

SIP Software Release 4.3 SP2	
Hardware Model	**Software**
1120E IP Deskphone	04.03.18.00
1140E IP Deskphone	04.03.18.00
1165E IP Deskphone	04.03.18.00
1220 IP Deskphone	04.03.18.00
1230 IP Deskphone	04.03.18.00

Language files are used for localization of IP Deskphones, and need to be updated separate from the SIP Software upgrade. The Language files are downloaded to the IP Deskphone via the Provisioning file. Up to five language files can be downloaded to the IP Deskphones. More details can be found in NN43170-600 SIP Software for Avaya 1100 Series IP Deskphones – Administration Guide. After a language file is downloaded to the IP Deskphone, the end-user can change the language that is displayed on the IP Deskphone by selecting the corresponding language in the Preferences menu.

Avaya recommends an upgrade to this SIP Software Release 4.3 Service Pack 2 for all applicable IP Deskphones and Call Servers at the earliest convenience. This SIP Software Service Pack 2 Release is compatible with the following Call Server platforms:

- Avaya IP Office R9.0 (1220, 1230, 1120E, 1140E IP Deskphones only)
- Avaya Branch Gateway B5800 Release 6.2 (1220, 1230, 1120E, 1140E IP Deskphones only)
- Avaya Communications Server 1000 (CS1000) R7.0, R7.5 and R7.6 (1220, 1230, 1120E, 1140E, 1165E)
- Avaya CS2100 SE13 and SE16 (1220, 1230, 1120E, 1140E, 1165E)

SIP Software Release 4.3 Service Pack 2 for IP Deskphones is available for download from the 'Downloads Page' on the Avaya Support Portal located at: https://support.avaya.com/downloads/download-details.action?contentId=C20138281617357750_2&productId=P0599&releaseId=SIP 4.x

NOTE: These SIP software loads are not introduced as the default loads for the IP Deskphones shipped from Avaya. A software upgrade is required for IP Deskphones which require SIP software.

Quality Improvements

This SIP Software Release 4.3 Service Pack 2 for 1100 Series and 1200 Series IP Deskphones continues to improve the overall quality of the IP Deskphone software through the delivery of ongoing resolution of Avaya identified work items. Numerous quality improvements are included, primarily in support of better interworking with Avaya IP Office. In addition, new language files, version 4.2.7, include a few language translation corrections for prompts on the display.

Copyright Avaya 2011 All rights reserved

IP Deskphone Compatibility

The following Software files contain SIP Software Release 4.3 Service Pack 2 compatible with the following IP Deskphones:

IP Deskphone Compatibility		
PEC	**Description**	**Software File**
NTYS03xxE6	1120E IP Deskphone	SIP1120e04.03.18.00.bin
NTYS05xxE6	1140E IP Deskphone	SIP1140e04.03.18.00.bin
NTYS07xxE6	1165E IP Deskphone	SIP1165e04.03.18.00.bin
NTYS19xx70E6	1220 IP Deskphone	SIP12x004.03.18.00.bin
NTYS20xx70E6	1230 IP Deskphone	SIP12x004.03.18.00.bin

Note: Early vintages of some IP Deskphone models have smaller memory capacity than models built later. IP Deskphones with smaller memory may go through a number of reboots before the SIP 4.3 SP2 upgrade is installed. See the Product Advisements section in this Readme document for more information.

Call Server Compatibility and Requirements

SIP Software Release 4.3 Service Pack 2 is compatible with the Avaya Call Servers listed below.

- Avaya IP Office Release 9.0
- Avaya Branch Gateway B5800 Release 6.2
- Avaya CS1000 Release 7.0, 7.5 and 7.6
- Avaya CS2100 SE13 and SE15

Product Advisements

The following is a list of resolved Product Advisements associated with the previous SIP Software Release 4.3 SP1. These have been addressed with this Service Pack 2 release.

IPCLIENTS-11294	If backgound image is set and the end user does a “check for update” there can be an unexpected phone reboot
IPCLIENTS-11299	SR 1-4234598146 1140 In rare configuration the middle multiple line section of the SIP phones displays garbled characters. Typically seen on caller id for second line incoming call
IPCLIENTS-11332	SR 1-4239662318 11x0 SIP Phone may reboot on re-login with presence enabled. This happens if users previous location is not present in the location list when the user is re-logged in.
IPCLIENTS-11336	SR 1-4248882856 1140 sets: In rare case users are unable to answer calls because the phone of the first user doesn't respond.
IPCLIENTS-11211	Phone doesn't establish TCP for the 2nd user if TLS connection fails
IPCLIENTS-11195	ECR log file contains incorrect information
IPCLIENTS-11157	1-1UE9CLQ ARP overflow causing one way speech path .

Copyright Avaya 2011 All rights reserved

IPCLIENTS-11171	SIP Phone is rebooted after login more than maximum users of phone
IPCLIENTS-8140	New Phone 1140 reboots after choosing Norwegian language.
IPCLIENTS-11256	Speed call key does not work from key 2 of 11XX set during a call)
IPCLIENTS-11249	Call ring of call settings work incorrectly when using custom ring tone
IPCLIENTS-11253	Cannot reset 1140 SIP to factory default by “reset2factory” ssh command line
IPCLIENTS-11263	11xx/12xx SIP sets do not display correct time on IP Office in New Zealand during Daylight Saving Time

Product Advisements for SIP Software Release 4.3 SP1 and earlier

The following is a list of Product Advisements or notes associated with SIP Software Release 4.3 Service Pack 1 or earlier. Some advisements remain from previous releases of software, whereas other advisements reflect new or changed behavior found or introduced with SIP Software Release 4.3 SP2.

Feature interaction issue between local phone 3-way conferencing and putting users on hold.

Putting user on hold while in the local phone 3-way conference may cause Music on hold to play.

If using SRTP with SRTP_CIPHER_2 AES_CM_128_HMAC_SHA1_80 the originator can not hold a call.

Workaround: either do not use SRTP or configure the SRTP to use SRTP_CIPHER_2 AES_CM_128_HMAC_SHA1_32. Tracking with CM ticket defsw131455

Limitations to User Data memory usage

User data such as custom ring tones, images, etc. must not exceed a total of 500kB. There may be not enough space in the file system for other data (e.g. phone logs, language files, user preferences, address books, Inbox/Outbox, etc.).

Potential for multiple reboots when upgrading earlier vintages of 1120E and 1140E IP Deskphones

Some earlier vintages of 1120E and 1140E IP Deskphones may go through a number of reboots before the SIP Software Release 4.4 upgrade is installed, due to a different memory configuration on these earlier models. See the chart below for vintages of 1120E and 1140E IP Deskphones that may exhibit this behavior. Not that this has changed from a previous communication where the earlier vintages of the 1120E and 1140E IP Deskphones noted below were said to be not supported at all.

IP Phone 1120E

NTYS03AC N0132697 IP Phone 1120E Graphite w/ Icon Keys w/o PS
NTYS03ACE6 N0132699 IP Phone 1120E Graphite w/ Icon Keys w/o PS (RoHS)
NTYS03BC N0132698 IP Phone 1120E Graphite w/ Eng Keys w/o PS
NTYS03BCE6 N0132700 IP Phone 1120E Graphite w/ Eng Keys w/o PS (RoHS)

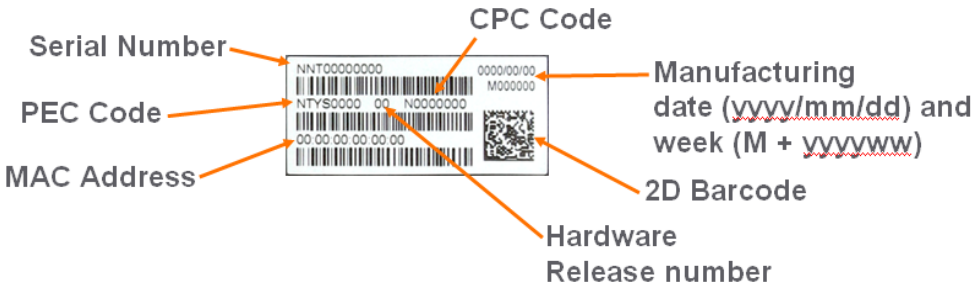
Copyright Avaya 2011 All rights reserved

NTYS03BCGSE6 N0132701 IP Phone 1120E Graphite w/ Eng Keys w/o PS (GSA)
NTYS03CAE6 N0142351 IP Phone 1120E (SIP) Graphite w/ Icon Keys w/o PS (RoHS)
NTYS03DAE6 N0142352 IP Phone 1120E (SIP) Graphite w/ Eng Keys w/o PS (RoHS)

IP Phone 1140E
NTYS05AC N0132702 IP Phone 1140E Graphite w/ Icon Keys w/o PS
NTYS05ACE6 N0132704 IP Phone 1140E Graphite w/ Icon Keys w/o PS (RoHS)
NTYS05BC N0132703 IP Phone 1140E Graphite w/ Eng Keys w/o PS
NTYS05BCE6 N0132705 IP Phone 1140E Graphite w/ Eng Keys w/o PS (RoHS)
NTYS05BCGSE6 N0132706 IP Phone 1140E Graphite w/ Eng Keys w/o PS (GSA)
NTYS05CAE6 N0142353 IP Phone 1140E (SIP) Graphite w/ Icon Keys w/o PS (RoHS)
NTYS05DAE6 N0142354 IP Phone 1140E (SIP) Graphite w/ Eng Keys w/o PS (RoHS)

1120E and 1140E IP Deskphones with PEC codes later than those in the table above will not show this behavior. That is, 1120E with PEC Codes with 'D' in them (NTYS03ADE6, NTYS03BDE6) or higher (where this character in the PEC Code is 'D' 'E', 'F' or beyond) will not show this behavior. Similarly, 1140E PEC Codes NTYS05AEE6, NTYS05BEE6, NTYS05BEGS or above will not show this issue.

The Figure below provides an explanation of where to identify the PEC and Hardware Release Number on the white product label located on the back of the IP Deskphone.



The following Product Advisements are related to known product behavior related to network conditions, hardware and accessories.

IP Deskphone's performance will be diminished during broadcast storms (applies to all the IP Deskphones)

By default, network traffic to the IP Deskphone will be accepted based on the packet's destination MAC address. The phone will therefore accept, in addition to all unicast packets sent to the phones MAC address, all broadcast and multicast packets as well. If the network environment results in a high amount of broadcast or multicast traffic, the IP Deskphone's performance may be impacted.

If "Voice 802.1Q" is enabled on the phone, the phone can then be provisioned to filter some or all of the broadcast or multicast traffic. If "VLAN Filter" is enabled, packets will be accepted by the phone based on the packet's destination MAC address as well as the packet's VLAN tag. Untagged packets and packets with a VLAN tag different from the Voice VLAN ID will be prevented from reaching the phone. This will protect the voice application from excessive traffic sent to the broadcast address or to the multicast addresses. But please be aware, if VLAN filtering is enabled on the phone, one must ensure that voice packets are tagged with the appropriate VLAN ID as they exit the network switch, or else the packets will be dropped by the filter.

Copyright Avaya 2011 All rights reserved

Throughput may be slow for large file transfers on conversions from GigE to 100Mbit (applies to the 1120E, 1140E, and 1165E IP Deskphones)

In networks in which a PC is connected to the IP Deskphone's PC port and the PC's NIC speed is 100Mbit but the network speed is at GigE, large file transfers to the PC can take quite a long time. This is an issue with large file transfers only. Due to the speed mismatch between the phone's two ports the buffers in the phone can overflow resulting in retransmissions.

Although the IP Deskphones support Ethernet flow control (802.3x), the support is only implemented on the phone's PC port, not on the phone's network port. Ethernet flow control is a mechanism were the IP Deskphone can request a brief "pause" from the transmitting Ethernet device if the IP Deskphone buffers are about to overflow.

Ethernet flow control cannot be implemented on the phone's network port, since it impacts the phone's voice quality. As a result, in environments were the network is GigE but the PC NIC is only 100Mbit, large file transfers from the network to the PC can take quite a long time. On the other hand, since Ethernet flow control is implemented on the phone's PC port, in environments were the PC NIC is GigE but the network is only 100Mbits, large file transfers should be well managed by the phone's Ethernet flow control mechanism.

Some models of Plantronics Bluetooth headset may unexpectedly become unpaired (applies to the 1140E and 1165E IP Deskphones)

An issue was uncovered with certain Plantronics Bluetooth headsets (including the formerly validated Plantronics Voyager 510/510S) in which the headset may unexpectedly become unpaired. If the unpair occurs during an active call, all audio will be lost to and from the headset. In such a situation the call will remain active and the user is recommended to switch to handset or handsfree. Due to the severity of this issue, Avaya does not recommend the use of the Plantronics Voyager 510/510S headset. The 1165E IP Deskphone is not supported with IP Office.

Backlight Interaction with USB devices (applies to the 1120E and 1140E IP Deskphones)

Some USB devices (i.e. Mice or Keyboards) send regular coordinate update messages to the phone even when the device is not being used. This can cause the sleep mode for the backlight to not be properly invoked.

Power disruption during software upgrade will corrupt the upgrade (applies to all the IP Deskphones)

During a software upgrade, if a power disruption is experienced by the phone, the software upgrade will fail. In some instances a power disruption during an upgrade may also corrupt the existing software on the phone. If this corruption should occur, the phone will fail over into its boot code known as "BootC". BootC will automatically try to restore the phone's software from the image on a call server. But for the 1100 Series and the 1200 Series IP Deskphones, if the phone's software was obtained from a TFTP server instead, in order to restore or upgrade the software from BootC, a manual TFTP download from BootC must be performed. The Manual TFTP Download from BootC Procedure is documented in the IP Phones Fundamentals NN43001-368. **NOTE: Caution should be exercised to avoid power disruptions during software upgrades.**

Copyright Avaya 2011 All rights reserved

References and Related Documents

Related documents are available on http://support.avaya.com using the following product path.

For SIP on 1100 Series IP Deskphones: https://support.avaya.com/products/P0599/1100-series-ip-deskphones/SIP%204.x
For SIP on 1200 Series IP Deskphones: https://support.avaya.com/products/P0600/1200-series-ip-deskphones/SIP%204.x

IP Deskphones documentation related to SIP software includes the following materials:

- NN43112-101 Avaya 1120E IP Deskphone with SIP Software User Guide
- NN43113-101 Avaya 1140E IP Deskphone with SIP Software User Guide
- NN43170-100 Avaya 1165E IP Deskphone with SIP Software User Guide
- NN43110-301 Avaya 1100 Series Expansion Module for SIP Software User Guide
- NN43170-600 SIP Software for Avaya 1100 Series IP Deskphones – Administration
- NN43170-101 Avaya 1220 IP Deskphone with SIP Software User Guide
- NN43170-102 Avaya 1230 IP Deskphone with SIP Software User Guide
- NN43139-100 Avaya 1200 Series Expansion Module for SIP Software User Guide
- NN43170-601 SIP Software for Avaya 1200 Series IP Deskphones – Administration

For IP Office User Guides: https://support.avaya.com/products/P0160/ip-office/8.1.x

- AV40050-104 Avaya 1120E IP Deskphone with SIP Software - User Guide
- AV40050-105 Avaya 1140E IP Deskphone with SIP Software - User Guide
- AV40050-111 Avaya 1200 Series IP Deskphones with SIP Software - User Guide

License Agreements

W3C(r) SOFTWARE NOTICE AND LICENSE

Copyright (c) 1994-2002 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University).

All Rights Reserved. http://www.w3.org/Consortium/Legal/

This W3C work (including software, documents, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications, that you make: The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.

Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, a short notice of the following form (hypertext is preferred, text is permitted) should be used within the body of any redistributed or derivative code:

"Copyright (c) 2004 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved. http://www.w3.org/Consortium/Legal/"

Notice of any changes or modifications to the W3C files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

Copyright Avaya 2011 All rights reserved

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS,

COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders June NOT be used in advertising or publicity pertaining to the software without specific, written prior permission.

Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

Copyright (c) 1998, 1999, 2110 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

HTTP Server functionality is provided by the GoAhead WebServer 2.1,

Copyright (c) 2004 GoAhead Software, Inc. All Rights Reserved.

© 2011 Avaya Inc. All Rights Reserved

Notice

While reasonable efforts were made to ensure that the information in this document was complete and accurate at the time of printing, Avaya Inc. can assume no liability for any errors. Changes and corrections to the information in this document may be incorporated in future releases.

Documentation disclaimer.

Avaya Inc. is not responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications, additions, or deletions were performed by Avaya.

Link disclaimer

Avaya Inc. is not responsible for the contents or reliability of any linked Web sites referenced elsewhere within this Documentation, and Avaya does not necessarily endorse the products, services, or information described or offered within them. We cannot guarantee that these links will work all of the time and we have no control over the availability of the linked pages.

License

USE OR INSTALLATION OF THE PRODUCT INDICATES THE END USER'S ACCEPTANCE OF THE TERMS SET FORTH HEREIN AND THE GENERAL LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE AT http://support.avaya.com/LicenseInfo/ ("GENERAL LICENSE TERMS"). IF YOU DO NOT WISH TO BE BOUND BY THESE TERMS, YOU MUST RETURN THE PRODUCT(S) TO THE POINT OF PURCHASE WITHIN TEN (10) DAYS OF DELIVERY FOR A REFUND OR CREDIT. Avaya grants End User a license within the scope of the license types described below. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the Documentation or other materials available to End User. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Software" means the computer programs in object code, originally licensed by Avaya and ultimately utilized by End User, whether as stand-alone Products or pre-installed on Hardware. "Hardware" means the standard hardware Products, originally sold by Avaya and ultimately utilized by End User.

License Type(s):

Designated System(s) License (DS). End User June install and use each copy of the Software on only one Designated Processor, unless a different number of Designated Processors is indicated in the Documentation or other materials available to End User. Avaya June require the Designated Processor(s) to be identified by type, serial number, feature key, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Copyright

Except where expressly stated otherwise, the Product is protected by copyright and other laws respecting proprietary rights. Unauthorized reproduction, transfer, and or use can be a criminal, as well as a civil, offense under the applicable law.

Third-party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements ("Third Party Components"), which may contain terms that expand or limit rights to use certain portions of the Product ("Third Party Terms"). Information identifying Third Party Components and the Third Party Terms that apply to them is available on Avaya web site at: http://support.avaya.com/ThirdPartyLicense/

Trademarks

Avaya, Avaya Aura, Communications Manager and the Avaya logo are registered trademarks and/or service marks of Avaya Inc. in the U.S. and certain other jurisdictions.

All other trademarks are the property of their respective owners.

Copyright Avaya 2011 All rights reserved